

Claims

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1. A digital camera comprising:
- (a) image capture means for converting a light image to digital image data;
- (b) transceiver means for sending and receiving digital data through a communications network; and
- (c) code means for selectively receiving messages sent to said camera by a message center.

2. A digital camera as recited in claim 1 further comprising automatic signal transmission means for automatically causing said transceiver to transmit a message request signal to said message center conveying an identification of said camera when said camera is turned on.

3. A digital camera as recited in claim 1 further comprising user activated means for causing said transceiver to transmit a message request signal to said message center conveying an identification of said camera.

4. A digital camera as recited in claim 1 further comprising means for disabling said automatic signal transmission means when a user does not want to receive messages.

1 5. A digital camera as recited in claim 1 wherein said code means includes a
2 unique identification for said camera.

1 6. A digital camera as recited in claim 1 further comprising first display
2 means including means for displaying said messages, and means for displaying said
3 image.

1 7. A digital camera as recited in claim 6 wherein said first display means is
2 an LCD display located on a back side of said camera.

1 8. A digital camera as recited in claim 6 wherein said first display means
2 includes a dedicated banner region for display of said messages.

1 9. A digital camera as recited in claim 6 further comprising a second display
2 means for displaying said messages.

1 10. A digital camera as recited in claim 9 wherein said second display means
2 is a display observable through a viewfinder of said camera.

1 11. A digital camera as recited in claim 6 further comprising interactive
2 message response means for responding to a question received in a message from said
3 message center.

1 12. A digital camera as recited in claim 11 wherein said interactive message
2 response means enables a user to selectively store, delete and skip a message.

1 13. A digital camera as recited in claim 11 wherein said first display means
2 includes a touch screen, and said interactive message response means is activated by
3 implementation of said touch screen.

1 14. A digital camera as recited in claim 11 wherein said interactive message
2 response means is activated by physical buttons external to said first display means.

1 15. A digital camera as recited in claim 5 further comprising audio means in
2 the form of a speaker for playing said messages on said digital camera.

1 16. A digital camera as recited in claim 15 wherein said messages can be
2 interactively replayed, stored and skipped.

1 17. A digital camera message system comprising:

2 (a) message center means including

3 (i) means for collecting, preparing and sorting messages to be
4 sent to a digital camera; and

5 (ii) first communication means responsive to reception of a
6 message request signal conveying a camera identification
7 for transmitting messages to said camera; and

- 8 (b) a digital camera including
- 9 (i) image capture means for converting a light image to digital
- 10 image data;
- 11 (ii) second communication means for sending and receiving
- 12 data through a communications network;
- 13 (iii) code means including means responsive to a code for
- 14 selectively processing messages sent to said camera; and
- 15 (iv) automatic signal transmission means for automatically
- 16 causing said second communications means to transmit a
- 17 message request conveying an identification of said camera
- 18 when said camera is turned on.

1 18. A digital camera message system as recited in claim 17 wherein said

2 message center means includes a capability to send a selected said message to a specific

3 said camera based on said code.

1 19. A digital camera message system as recited in claim 17 wherein said

2 message center means further includes a capability to send a message simultaneously to a

3 plurality of cameras by transmitting a corresponding particular said code.

1 20. A digital camera message system as recited in claim 17 wherein said

2 message center means further includes a capability to prioritize messages as part of a

3 single packet of multiple said messages.

1 21. A digital camera message system as recited in claim 17 wherein said
2 digital camera further includes means for disabling said automatic signal transmission
3 means when a user does not want to receive messages.

1 22. A digital camera system as recited in claim 17 wherein said camera further
2 includes message display means for displaying said messages.

1 23. A digital camera system as recited in claim 22 wherein said camera further
2 includes a system for temporarily storing said messages prior to displaying said
3 messages.

1 24. A digital camera system as recited in claim 23 wherein said camera further
2 includes means for selecting a particular one of said stored messages.

1 25. A digital camera system as recited in claim 24 wherein said means for
2 selecting includes setting said camera to automatically display a list of stored messages
3 sequentially with each message displayed for a set amount of time.

1 26. A digital camera system as recited in claim 24 wherein said means for
2 selecting includes means for automatically displaying the messages in an order according
3 to a priority assigned by the message center.

1 27. A digital camera system as recited in claim 22 wherein said message
2 display means is an LCD display located on a back side of said camera.

1 28. A digital camera as recited in claim 22 wherein said message display
2 means is viewed through a viewfinder of said camera.

1 29. A digital camera as recited in claim 22 wherein said message display
2 means is generated through a speaker located on the camera.

1 30. A digital camera system as recited in claim 22 wherein said camera further
2 includes interactive message response means for responding to a question received in a
3 message from said message center.

1 31. A digital camera system as recited in claim 30 wherein said interactive
2 message response means is activated by a touch screen.

1 32. A digital camera system as recited in claim 30 wherein said interactive
2 message response means is activated by physical buttons external to said message display
3 means.

1 33. A method of communication comprising:

- 2 (a) preparing a message at a message center for transmission to a
3 camera;

- 4 (b) transmitting a message request to said message center by a
5 transceiver means included in said camera, said message request
6 containing identification of said camera;
7 (c) transmitting said message from said message center to said
8 camera; and
9 (d) displaying said message on a display means.

1 34. A method of communication as recited in claim 33 further comprising:

- 2 (a) means for preparing multiple messages to be transmitted; and
3 (b) assigning priority values to said messages.

1 35. A method of communication as recited in claim 34 wherein said priority
2 values include a length of time to display each said message.

1 36. A method of communication as recited in claim 34 wherein said priority
2 values include an order of display of said messages.

1 37. A method as recited in claim 33 further comprising disabling said
2 transceiver means to avoid transmitting said message request.

1 38. A method as recited in claim 33 wherein said display means includes a
2 dedicated banner region for display of said messages.

1 39. A method as recited in claim 33 wherein said display means includes a
2 separate dedicated display means dedicated for display of said messages.

1 40. A method as recited in claim 39 wherein said dedicated display means
2 includes a display that is received through a viewfinder of said camera.

1 41. A method as recited in claim 39 wherein said display means includes an
2 LCD display on a back side of said camera.

1 42. A method as recited in claim 39 wherein said display means includes a
2 speaker located on the camera.

1 43. A method as recited in claim 33 further comprising
2 (a) including in said message a request for a response; and
3 (b) responding to said request for a response by transmitting a
4 response from said camera to said message center.

1 44. A method as recited in claim 43 wherein said response is activated by
2 physical buttons external to said message display means.

1 45. A method as recited in claim 43 wherein said display means includes a
2 touch screen and said response is activated by implementing said touch screen.

1 46. A digital camera message system comprising:

2 (a) message center means including

3 (i) means for collecting, preparing and sorting messages to be
4 sent to a digital camera, said messages including

5 a) a generic message for transmission to all of a
6 plurality of said cameras;

7 (b) an interest group based message for transmission to
8 selected said cameras of a particular interest group;

9 (c) a personal message prepared for transmission to a
10 selected one of said cameras; and

11 (ii) means for transmission of said messages to said cameras
12 including

13 (a) means for repeatedly transmitting said messages;

14 (b) means for including a code, for allowing each said
15 interest group message and each said personal
16 message to be received only by a corresponding
17 selected said camera.

1 47. A digital camera message system as recited in claim 46 further comprising
2 means for continuously sending said messages.

1 48. A digital camera message system as recited in claim 46 further comprising
2 means for unselectively sending said messages.

1 49. A digital camera message system as recited in claim 46 further comprising
2 means for sending said messages only when a request arrives from a said digital camera.

1 50. A digital camera message system as recited in claim 46 further
2 comprising:

3 (a) a digital camera including

4 (i) image capture means for converting a light image to digital
5 image data;

6 (ii) communication means for sending and receiving data
7 through a communications network;

8 (iii) code means including means responsive to a code for
9 selectively receiving said messages sent to said camera
10 through said network; and

11 (iv) disabling means wherein a user can select to receive or not
12 receive said messages.

1 51. A digital camera message system as recited in claim 46 wherein said
2 personal messages are encrypted.

1 Sub a27 52. A digital camera as recited in claim 47 further comprising means for
2 decrypting said personal messages.

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